

IVANOV, N. P.

231T22

USSR/Electricity - Hydroelectric
Generators

Oct 52

"Hydroelectric Generators," N. P. Ivanov, Ener,
Prof G. N. Petrov

"Elektrichestvo" No 10, pp 11-24

Characteristics of modern high-power hydroelec
Generators are discussed and the main structural
units of various machines are described. Authors
state that the largest hydroelec generators in
the world have been built in USSR and are being
used at Shcherbakov and Dnepr stations, even

231T22

though the power of the Grand Coulee generator is
108,000 kva while that of the Shcherbakov and
Dnepr generators are 70,000 kva and 90,000 kva,
resp. The characteristic upon which authors base
claim is kva/rpm.

231T22

IVANOV, N.P., glavnyy konstruktor, laureat Stalinskoy premii.

~~.....~~
Giant hydrogenerators. Nauka i zhizn' 20 no.12:6-8 D '53.

(MLRA 6:12)

1. Zavod "Elektrosila" im. Kirova.

(Dynamos)

SOV/112-58-3-3821

8(2,5)

Translation from: Referativnyy zhurnal. Elektrotehnika, 1958, Nr 3, p 44 (USSR)

AUTHOR: Ivanov, N. P.

TITLE: Automatic-Control System for Hydrogen Cooling of Steam-Turbine Generators (Sistema avtomaticheskogo upravleniyavodorodnym okhlazhdeniyem turbogeneratorov)

PERIODICAL: V sb.: Raboty M-va elektrotekhn. prom-sti SSSR po mekhaniz. i avtomatiz nar khoz-va, Vol 1, M., 1956, pp 113-117

ABSTRACT: An automatic-control system for hydrogen cooling of steam-turbine generators is described; the system is manufactured by the "Elektrosila" plant. The system functions are: (1) automatic maintaining of specified pressure and purity of hydrogen in the generator housing; (2) signaling of abnormal increase or decrease in hydrogen pressure in the generator housing; (3) maintaining of specified rise of seal-oil pressure over hydrogen pressure in the generator housing. A general view of the gas-control panel, a

Card 1/2

8(2,5)

SCV/112-58-3-3821

Automatic-Control System for Hydrogen Cooling of Steam-Turbine Generators
simplified schematic of the generator-housing gas supply, and a simplified
schematic of controls and signaling are presented.

B.A.N.

Card 2/2

IVANOV, N.P.; YEREMEYEV, A.S.; LYUTER, R.A.; KAPLAN, N.Ya.; IPATOV, P.M.

Powerful hydrogenerators. Elektrosila no.14:5-11 '56.
(MIRA 12:12)

(Hydroelectric power stations)

IVANOV, N.P., inzhener.

Development of turbogenerator building. Vest.elektroprom. 27 no.2:6-11
F '56. (MIRA 9:7)

1.Zaved "Elektresila" imeni S.M.Kireva Ministerstva elektropromyshlen-
nosti.
(Electric generators)

IVANOV, N.P.

2

641,119,322-01

76. PROBLEMS IN DESIGNING FORCED-COOLED TURBO-

GENERATORS¹ N.P. IVANOV

Elektricheskoye, 1967, No. 11, 34-40. In Russian.

The problems associated with the design of forced-cooled generators have so far been only partially solved. Highest unit ratings, 150 MW and over, now confront the designer with new problems which are examined. Problems discussed include rotor and stator design and energy losses through ventilation and excitation. Water-cooled armature windings are examined.

Central Electricity Generating Board Diagram.

641

IVANOV, N.P., inzh.

Soviet turbogenerators. Vest. elektroprom. 28 no.11:41-48 N '57.
(MIRA 10:12)

1. Zavod "Elektrosila."
(Turbogenerators)

10(3,4) PULSE I BOOK EXPLOITATION 507/3193

Leningrad. Politehnicheskii Institut Iseni M.I. Kalinina
Prudy, no. 108] Tekhnicheskaya gidromekhanika (Industrial Hydro-
mechanics) Moscow, Mashiz, 1958. 220 p. Errata slip inserted.
1,500 copies printed.

Resp. Ed.: V.J. Salinov, Doctor of Technical Sciences, Professor;
Ed. of this book: L.G. Lorytskiy, Doctor of Physical and
Mathematical Sciences, Professor; Managing Ed. for Literature
on the Design and Operation of Machines (Leningrad Division,
Mashgiz): P.I. Petisov, Engineer; Tech. Ed.: R.G. Pol'skiy.

PURPOSE: This book is intended for engineers working in the field
of machine construction.

CONTENTS: This collection of articles contains the results of
original work in the field of theoretical and applied hydroaero-
dynamics, completed in the aerodynamics laboratory of the Leningrad
(Leningrad Polytechnic Institute) by members of the department
of hydroaerodynamics and the department of theoretical mechanics.

The book is divided into four parts. The first part contains
studies of turbine steam-exhausts. The first article gives the
results of a laboratory study on model-experiments on a test-
stand and the general conclusions drawn therefrom. The second
part contains articles on the theory of laminar and turbulent
motion of a viscous fluid. The articles treat the hydrodynamic
theory of friction in bearings and suspensions, the hydrodynamic
and jets, the initial part of a pipe in the field of applied
hydrodynamics. The second part contains articles on the theory of
aerodynamics. The third part contains articles on the theory of
aerodynamics. The fourth part of the book contains the results
of laboratory experiments on establishing new methods of aero-
dynamic measurements (friction forces on the surface of a
streamlined body, pressure distributions in nonstationary flows).
References accompany individual articles.

IVANOV, M.P. Removal of Mechanical Losses in the Bearings of
Hydroturbine Models
1. Existing methods of determining and eliminating
2. Friction losses
3. Determining mechanical losses by the check-out method
4. Weights (brakes)
5. Construction of gear assemblies
6. Experimental analyses
7. Conclusions

PART TWO. HYDRODYNAMICAL PROCESSES IN CHANNELS, BOUNDARY LAYER AND JETS

LORYTSKIY, L.G., and L.G. Stepanyants. Hydrodynamical Theory
of a Spherical Suspension
1. Stating the problem on a spherical suspension.
2. Fundamental equation
3. Application of the method of expansion according
to the parameter

4. Suspension with one source
5. Computing the effect of the compressibility of a gas
on the operation of a suspension

Stepanyants, L.G. Calculating the Inertial Terms in the
Hydrodynamical Theory of Lubrication
1. Stating the problem
2. Application of the method of expansion according
to the parameter
3. Determination of the unknown functions of the first
approximation
4. Determination of the constants of integration
5. Some results

110-58-6-2/22

AUTHOR: Ivanov, N.P., Engineer

TITLE: A New Approximation Method of Designing Thrust Bearings
(Novyy priblizhennyi metod rascheta podpyatnikov)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 6,
pp 8 - 15 (USSR)

ABSTRACT: The behaviour at starting of a thrust-bearing pad with a cylindrical seating is described and the formation of a wedge-shaped oil-film is briefly explained. In designing a thrust bearing, the main thing is to determine the geometry of this lubricating film. Firstly, there is a calculation of the rate of flow of oil from the space between two parallel plates when one is loaded: the calculation is then extended to a loaded annulus. The rate of flow is proportional to the square of the film. After a description of the effect of tangential displacement without loading, the case of combined loading and displacement is considered. The formation of a wedge-shaped film when one plate is pivoted is explained in terms of the rate of oil flow out of the bearing and oil-film thicknesses are calculated. The effect of the position of the support on the film geometry is then analysed, particularly the effect of moving the point of support away from the centre of the plate.

Card 1/3

110-58-6-2/22

A New Approximate Method of Designing Thrust Bearings

Calculations of the resultant changes in the maximum pressure, the position of maximum pressure and the slope of the segment are tabulated (Table 1). The effect on the slope of moving the point of support forward is shown in Table 2. The losses and heat generation in the oil film are also calculated.

A comparison is then made between calculated and experimental data on a model thrust bearing tested under the guidance of Professor A.K. D'yachkov at the Institut mashinovedeniya AN SSSR (Engineering Institute of the Ac.Sc. USSR). The dimensions of the model are tabulated, the outside diameter being 0.8 m and the test results are plotted in Figure 10. The bearing was tested with the point of support in different places and with various speeds and oil viscosities. The maximum permissible loading of the bearing, defined as that at which damage to the surfaces occurred, was determined for different cases. Calculations of the oil-film thickness at which this occurred are given in Table 3. At failure, the minimum thickness of oil film in different cases ranged from 20.2 to 9.9 μ , so that this value is evidently no criterion of permissible loading. Instead, the

Card2/3

110-58-6-2/22

A New Approximate Method of Designing Thrust Bearings

mean film thickness is recommended as the basic parameter. This new approximate design method makes it possible to determine the dimensions of the oil film, firstly, when the support is central and then when it is in other positions. The results are in good agreement with test data both on the laboratory rig and in the field. There are 10 figures, 3 tables and 9 references, 6 of which are Soviet and 3 English.

ASSOCIATION: Zavod "Elektrosila" (Elektrosila Works)

SUBMITTED: February 6, 1958
1. Thrust bearings---Design

Card 3/3

SOV/110-59-2-1/21
AUTHORS: Ivanov, N.P., Pankratov, B.Ya., Rabinovich, I.N., and
Shubov, I.G., Engineers

TITLE: Water-cooled Direct Current Machines (Mashiny
postoyannogo toka s vodyanym okhlazhdeniyem)

PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 2, pp 1-4
(USSR)

ABSTRACT: The disadvantages of normal methods of cooling rotating machines are briefly described. Graphs showing the reduction in output for a given frame size for totally enclosed as compared with protected machines are given in Fig 1. The increase in overall machine size that results from the use of air coolers is illustrated by the outline drawings of Fig 2. Because of the great need for a small totally enclosed machine the authors have developed the design and manufacture of an enclosed machine with internal water cooling, a general view of which is given in Fig 3, whilst the armature and stator are shown separately in Fig 4. The machine is cooled by special elements in the form of brass discs to which brass tubes are brazed (see Fig 5A). These plates, which are 10 mm thick, are assembled in the armature steel.

Card 1/3

SOV/110-59-2-1/21

Water-Cooled Direct Current Machines

The ends of the tubes are all connected to the central bore of the shaft, and at the free end of the shaft there is a water distributing head which has channels for delivery and return of water. The main and commutating poles are cooled by the flat brass elements illustrated in Figs 5b and 5c which also contain cooling tubes. The ends of all the tubes in the cooling elements of the stator are brought out to a water distributing ring. Comparative test data for this totally enclosed machine with and without water cooling and with a protected machine are tabulated, and it will be seen that the use of water cooling increases the output of the enclosed machine from 4 to 17 kW. The water consumption is about 15 litres/min and the inlet temperature is 12°C. The output of the protected machine is 14 kW. The first experimental machine did not make the best use of the

Card 2/3

Water-Cooled Direct Current Machines

SOV/110-59-2-1/21

cooling facilities available and later designs are improved in this respect; there will be more coolers in the stator, the field windings will be made of hollow conductors and a pump will be built into the machine to make it more independent. The construction is particularly advantageous for machines with a wide range of operating speeds which normally require external fans. The main disadvantage of water cooled machines is that they need fresh water.

Card 3/3

There are 5 figures and 1 table.

SUBMITTED: June 20, 1958

IVANOV, N.P., inzh.

Problems concerning the design of large hydrogenerators. Vest.
elektroprom. 32 no.6:5-11 Je '61. (MIRA 16:7)
(Turbogenerators)

IVANOV, N.P.; FILIPPOV, I.F.

Methodology for thermal calculation of electrical machines with direct cooling. Elektrichestvo no.1:17-21 Ja '63. (MIRA 16:2)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.
(Electric machinery--Cooling)

IVANOV, N. P.; KOSTENKO, M. P.; KAZOVSKIY, E. I.; STANISLAVSKIY, L. I.; POTEKHIN, K. F.

"Large Modern Highly Utilized Turbine and Waterwheel Generators, Their Cooling Systems, Characteristics and Parameters."

Large
report submitted for Intl Conf on/Electric Systems, 20th Biennial Session, Paris,
1-10 Jun 64.

UDOVENKO, G.V.; IVANOV, N.P.

Effect of the general level of mineral nutrition on the intensity
of chlorine uptake in plants. Dokl. AN SSSR 152 no.2:489-491
S '63. (MIRA 16:11)

1. Nauchno-issledovatel'skiy institut zemledeliya, Minsk.
Predstavleno akademikom A.L. Kursanovym.

IVANOV, N.P.; KOZYREVA, N.A.

Atomic-absorption determination of copper in chemical reagents.
Zav. lab. 30 no.6:706 '64 (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

DOMBROVSKIY, Vyacheslav Vyacheslavovich; YEREMEYEV, Aleksandr
Sergeyevich; IVANOV, Nikolay Pavlovich; IPATOV, Pavel
Mikhaylovich; KAPLAN, Moisey Yakovlevich; PINSKIY,
Grigoriy Borisovich; ZHERVE, G.K., nauchn. red.;
ZARITSKIY, Ya.V., red.

[Design of hydrogenerators] Proektirovanie gidrogenera-
torov. [By] V.V.Dombrovskii i dr. Moskva, Energiya.
Pt.1. 1965. 257 p. (MIRA 18:3)

BOGOYAVLENSKIY, K.N.; GRIGOR'YEV, A.K.; MEL'NICHUK, O.Ya.; IVANOV, N.P.

Investigating power parameters of rolling on mills with swivel bearings. Trudy LPI no.243:126-131 '65.

(MIRA 18:6)

KOSTENKO, M.P., akademik; LYUTER, R.A., doktor tekhn.nauk; KAZOTENKIV, Ye.Ye.,
doktor tekhn.nauk, prof.; IVANOV, N.P., kand. tekhn.nauk

Conditions governing the use of nonsynchronous cutting-¹⁶
in electric power systems. Elektrichestvo no.12:77-78 D:165.
(MIRA 18:12)

IVANOV, N. P.; GUSINSKIY, M. N.; YESIKOV, A. D.

Use of a discharge tube with a hollow cathode in atomic-absorption spectrophotometry. Zhur. anal. khim. 20 no. 10: 1133-1135 '65.
(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistyykh khimicheskikh veshchestv i Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

I 24843-66 EWT(d)/EWT(m)/EWP(v)/I/EWP(k)/ENP(h)/ENP(l) DJ

ACC NR: AP6007685

(A)

SOURCE CODE: UR/0413/66/000/003/0066/0066

32

B

AUTHORS: Zusman, Sh. M.; Ivanov, N. P.; Gutsaki, V. A.

ORG: none

TITLE: Device for controlling the accumulated circular pitch error in gears. Class 42, No. 178502 14

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 66

TOPIC TAGS: gear cutting machine, ~~actuating~~ transmission gear

ABSTRACT: This Author Certificate presents a device for controlling the accumulated circular pitch error in gears, based on the sequential measurement of error by the position of two identical profiles diametrically placed. The device contains a supporting and a measuring carriage, vertically adjustable centers for mounting the wheels in a fixture, synchronously rotating supporting and measuring probes in the form of worms in constant contact with the controlled gear, and a measuring device. To increase measuring accuracy and to simplify construction, the supporting and measuring probes are in the form of flat, split spring disks with part of the profile bent to the size of the controlled gear pitch. These are used to index the gear to the next measuring position (see Fig. 1).

Card 1/2

UDC: 53.088.7.08:621.833

L 24843-66

ACC NR: AP6007685

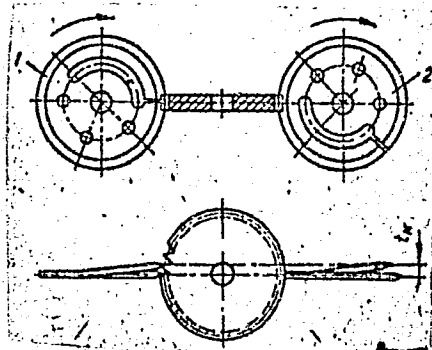


Fig. 1. 1 and 2 - supporting
and measuring probes;
 t_k - controlled gear pitch.

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 17Apr64

Card 2/2 data

IVANOV, N. P.

6

Chemical Abst.

Vol. 10, 1964

Analytical Chemistry

Spectrophotometry in chemical analysis. 6. I. Ivanov
and N. P. Ivanov. V. I. Verbitskiy. (USSR).
(1963) Eng. translation. Ser. 1. 47. 111.

IVANOV, N.P.

Spectral determination of uranium in ores and intermediate products by means of isotope additions. Fiz.sbor. no.4:109-112 '58. (MIRA 12:5)

1. Institut goskhimii i analiticheskoy khimii imeni V.I.Vernadskogo AN SSSR.

(Uranium---Spectra)

24(7)

SOV/48-23-9-48/57

AUTHOR: Ivanov, N. P.

TITLE: The Spectroscopic Determination of Uranium by the Method of Isotope Admixtures (Precision Variants)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1154 - 1156 (USSR)

ABSTRACT: It has already previously been shown that by introducing the uranium isotopes U^{235} and U^{238} into the sample to be analyzed, the accuracy and universality of the method of determining uranium may be improved. (Refs 1-3). In the present paper further results of this development are described. It is a known fact that the background of the spectrum limits the accuracy of the elementary methods of isotope admixture. Increase in accuracy may be attained by means of two methods. In the method of "equal blackening" various quantities of a light uranium isotope are supplied in several equal portions of one and the same sample. Next, the dependence of the blackening differences of the isotopic lines $\Delta S = S_{U^{238}}$ and $S_{U^{235}}$ on the concentration of the light isotope U^{235} is graphically constructed.

Card 1/2

The Spectroscopic Determination of Uranium by the Method SOV/48-23-9-48/57
of Isotope Admixtures

According to the example in figure 1 the concentration of U^{235} is then determined at which the line intensities of both components are equal. By means of this value the required concentration is then calculated according to the formula given. As in this method the background need not be taken into account, accuracy is improved. In the method of "two isotopes" two light isotopes are simultaneously added and the concentration is determined in accordance with the example in figure 2. Also in this method the influence exercised by the background is avoided, and only one portion of the sample will be found to suffice. This method further permits the determination of uranium even at very low concentrations (within the range of 10^{-6} - $10^{-7}\%$) with great accuracy. There are 2 figures and 3 Soviet references.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo Akademii nauk SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy of the Academy of Sciences, USSR)

Card 2/2

IVANOV, N.P.

Spectral determination of uranium by the method of isotope
additions. Zhur.anal.khim. 15 no.3:315-320 My-Je '60.
(MIRA 13:?)

(Uranium--Analysis)

IVANOV, N.P.

Analytical possibilities of a gas discharge tube with an a.c. fed
twin hollow cathode. Zhur.anal.khim. 17 no.1:126-128 Ja-F '62.
(MIRA 15:2)

1. Scientific Research and Design Institute of Rare Metal Industry
"Giredmet", Moscow.

(Spectrum analysis)

IVANOV, N.P.; NEDLER, V.V.; ANDRIKANIS, E.N.

Use of a hot hollow cathode in the analysis of titanium
oxide. Zav.lab. 27 no.7:836-838 '61. (MIRA 14:7)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut redkometallicheskoj promyshlennosti.
(Titanium oxide--Spectra)

IVANOV, N.P.; ANDRIKANIS, E.N.

Determination of impurities in titanium and its compounds.

Metod. anal. khim. reak. i prepar. no.7:73-76 '63.

(MIRA 17:5)

IVANOV, N.P.; KFASTIL'SHCHIK, V.Z.

Basic properties and analytical application of a hollow
cathode. Metod. anal. khim. reak. i prepar. no. 7:5-68 '63.
(MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh
reaktivov i osobo chistykh khimicheskikh veshchestv.

L 14164-66 EWP(j)/EWT(m)/ETC(m)-6/T RM/NW

ACC NR: AP6003937

SOURCE CODE: UR/0374/65/000/005/0034/0038

AUTHOR: Ivanov, N. P. (Leningrad); Stepanov, V. A. (Leningrad)

ORG: none

TITLE: Measuring the strength of plastics by high speed compression

SOURCE: Mekhanika polimerov, no. 5, 1965, 34-38

TOPIC TAGS: ~~reinforced plastic~~, reinforced plastic, dynamic stress, ~~high speed~~, high speed photography, *resin, ultimate stress high temperature research, low temperature research*

ABSTRACT: The strength of two reinforced plastics and of two pure resins at temperatures from minus 196C to plus 150C was determined by high speed photography. The strength of plastics at an elevated temperature was sensitive. The difference in the static and dynamic properties at minus 196C was insignificant. Authors thank N. G. Mazayev, senior laboratory technician, for his great help in carrying out the tests. Orig. art. has: 5 figures. [Based on author's abstract].

SUB CODE: 11/ SUBM DATE: 24May65/ ORIG REF: 007

Card 1/1

UDC: 678:539.4.019

Ivanov N. P.

AUTHORS: Ivanov, N.P., and Livshits, B.Ya.

68-1-7/22

TITLE: From Experience in Automatic Control of Heating Coke
Ovens (Opyt avtomaticheskogo regulirovaniya obogreva pechey)

PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 29 - 30 (USSR)

ABSTRACT: Results on an investigation of the operation of an automatic control of the TsLA-UKhIN system of heating coke ovens are described. The system (description is given in this issue, pp. 17 - 24) was installed on the No. 1 battery of the Zaporozh'ye Coke Oven Works. The control of heating is based on the maintenance of the constant supply of heat to each side of the battery and a constant coefficient of excess air in the waste gas. The latter can be controlled by maintaining either a constant excess of oxygen in the waste gas or a constant suction at the top of the regenerators on the ascending stream. The operation of the automatic control was checked for both methods of maintaining a constant excess air. The results are given in Tables 1 and 2, respectively. The results obtained indicated that the second version of the automatic control (constant suction) is a better method as in both cases, the variation in the coefficient of excess air was the same (0.1), but with the first version (constant oxygen)

Card1/2 suction on the top of the regenerators on the ascending stream

68-1-7/22

From Experience in Automatic Control of Heating Coke Ovens.

varied and therefore the temperature curve along the heating walls was not constant, while with the second version coke oven hydraulic conditions remained stable. It is concluded that the above system of automatic control can be recommended, but the accuracy of the automatic calorimeter and magnetic gas analyzers should be further improved. There are 2 tables.

ASSOCIATION: Zaporozh'ye Coke Oven Works (Zaporozhskiy koksokhimicheskiy zavod)

AVAILABLE: Library of Congress

Card 2/2

IVANOV N.P.

68-1-10/22

AUTHOR: Peresadenko, I.N., and Ivanov, N.P.

TITLE: Control of Heating Coke Ovens of the System PK-45 Fired with Blast Furnace Gas by the Bottom Dumpers with the Top Dumpers Fully Opened (Regulirovaniye obogreva koksovykh pechey sistemy PK-45 na domennom gaze nizhnimi registrami pri polnost'yu otkrytykh verkhnikh registrakh)

PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 39 - 42 (USSR)

ABSTRACT: At the Zaporozh'ye Coke Oven Works, the heating system of battery No.3, of the PK-45 system (fired by blast furnace gas) was deficient, despite the fact that rectangular checkers in regenerators were replaced by grate-like checkers, namely, the top of the coke was underheated (Table 1). Investigations of the waste gas in the individual flues (Table 2) indicated an insufficient supply of gas to the middle flues. By completely opening the top dumpers and adjusting the bottom dumpers, heating conditions on the battery considerably improved (Tables 5, 6 and figure), which reflected in the quality of the coke produced (Table 6). It is concluded that in order to improve heating conditions of coke ovens of the types PK-45 and PK-47 which were in operation for a considerable period, it is necessary to control their heating conditions with the bottom dumpers while the top dumpers should remain completely open.

Card1/2

SOV/68-58-11-17/25

AUTHORS: Livshits, B.Ya., and Ivanov, N.P.

TITLE: Cleaning Tar and Deposits From Gas Collecting Mains of Coke
Oven Batteries with Ammonia Water (Ochistka
ammiachnoy vodoy gazosbornikov koksovykh batarey ot
fusov i smoly)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 54-55 (USSR)

ABSTRACT: Cleaning of collecting gas mains from tar and deposits
with ammonia liquor used on the Zaporozh'ye Works is
described. Ammonia liquor is pumped at a rate of 50m³/hr
into the main (see Fig). The time required to clean
one collecting main is 2 hours.
There is 1 figure.

ASSOCIATION: Zaporozhskiy Koksokhimicheskiy Zavod (Zaporozh'ye
Coking Works)

Card 1/1

LIVSHITS, B.Ya.; SHAFoval, M.I.; IVANOV, N.P.

Automatic control of the heating of coke ovens. Koks i khim.
no. 3:26-29 '61. (MIRA 14:4)

1. Institut avtomatiki Gosplana USSR (for Livshits, Shapoval).
2. Zaporozhskiy koksokhimicheskiy zavod (for Ivanov).
(Coke ovens) (Automatic control)

LIVSHITS, B.Ya.; DUDKO, I.Ye.; SHAPOVAL, M.I.; IVANOV, N.P......

Automatic outlet of gas from coke oven gas collectors. Koks
i khim. no.7:25-27 J1 '61. (MIRA 14:9)

1. Institut avtomatiki Gosplana USSR (for Livshits, Dudko,
Shapoval). 2. Zaporozhskiy koksokhimicheskiy zavod (for
Ivanov).

(Coke-oven gas)

IVANOV, N.P.; ANDRIKANIS, E.N.

Analytical use of a gas discharge tube with a double hollow
cathode. Zav.lab. 29 no.8:1002 -1005 '63. (MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
redkometallicheskoj promyshlennosti.
(Spectrum analysis) (Electric discharges through gases)

ACC NR: AP7002387

SOURCE CODE: UR/0020/66/171/005/1092/1095

AUTHOR: Ivanov, N. R.; Shuvalov, L. A.; Kislovskiy, L. D.

ORG: Institute of Crystallography, Academy of Sciences SSSR (Institut kristallografii Akademii nauk SSSR)

TITLE: On the structural mechanism of the electrooptical and thermooptical effects in ferroelectric crystals of the triglycinsulfate type

SOURCE: AN SSSR. Doklady, v. 171, no. 5, 1966, 1092-1095

TOPIC TAGS: electrooptic effect, ion, ferroelectric material, glycine, sulfate, crystallography

ABSTRACT: Theoretical and experimental investigations were made of the important part played by the deformation of SO_4^{2-} or SeO_4^{2-} ions in the occurrence of spontaneous polarization in monoclinic triglycinsulfate or triglycinselenate crystals. The deformation resulting from the displacement of nitrogen atoms can be measured by directional changes of the maximum polarizability, i.e., by shifts of the indicatrix of the crystal. Measurements were performed of the shifts of the optical indicatrix in the paraelectric phase at a temperature close to the melting temperature of the crystals. These shifts showed up as breaks on the $\phi(T)$ dependence curves, which are explained as indicating the presence in both crystals of

Card 1/2

UDC: 548:537+536

ACC NR: AP7002387

several characteristic temperatures above the curie point, at which the rupture of bonds takes place. It is suggested that the results can be extrapolated to other crystals of the same type. Thus, for example, one can calculate that the melting temperature of triglycinfluoberyllate is 230—235C. Orig. art. has: 3 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 11Feb66/ ORIG REF: 006/ OTH REF: 001/
ATD PRESS: 5113

Card 2/2

L 44811-66 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG/GG

ACC NR: AP6032022

SOURCE CODE: UR/0386/66/004/006/0220/0226

AUTHOR: Ivanov, N. R.; Shuvalov, L. A.; Fedosyuk, R. M.; Pluzhnikov, K. A. ⁶⁹

ORG: Institute of Crystallography, Academy of Sciences, SSSR (Institut kristallografi Akademii nauk SSSR) ³

TITLE: Proof of the existence of two sharply distinct ferroelectric phases in $\text{NaH}_3(\text{SeO}_3)_2$ ^{2, 8}

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 6, 1966, 220-226

TOPIC TAGS: ferroelectricity, phase transition, second order phase transition, electric polarization, dielectric constant, temperature dependence

ABSTRACT: The authors investigated the ferroelectric properties of large homogeneous single crystals of $\text{NaH}_3(\text{SeO}_3)_2$, grown from the aqueous solution by the method of dropping the temperature, having a Curie point $T_C = -78.6^\circ\text{C}$ and a melting temperature $111 \pm 0.5^\circ\text{C}$. Measurements of the low-frequency (800 cps) dielectric constant at a measuring-field intensity 10 v/cm were made for three mutually perpendicular cuts oriented parallel to the principal sections of the optical indicatrix: the crystallographic directions were taken to be the principal axes of the indicatrix, so that the x, y, and z axes were directed respectively along the acute and obtuse bisectors and the normal to the plane of the optical axes. The temperature dependence of the rotation of the indicatrix $\varphi(T)$ about the y axis and the components of the spontaneous

Card 1/3

L 44811-66

ACC NR: AP6032022

polarization were measured. The measurements have demonstrated conclusively the presence of one more phase transition in $\text{NaH}_3(\text{SeO}_3)_2$ at -172.5°C , at which a jumpwise decrease takes place in the components of the dielectric constant. The transition has a temperature hysteresis of 10.5° . Consequently, the transition is of first order. The temperature dependence of the various components of the dielectric constant, of the spontaneous polarization, and of the coercive field were also investigated. An analysis of the obtained information leads to the following conclusions.

1. $\text{NaH}_3(\text{SeO}_3)_2$ undergoes two phase transitions, one at -78.6°C (second order but close to first order) from the paraelectric α phase to the ferroelectric β phase.
2. In the absence of external action, the γ phase (or part of it) can remain metastable in the crystal in the range $-162^\circ\text{C} < T < T_c$. An external electric field or mechanical action can transform the crystal to the β phase which is stable in this temperature region.
3. In the γ phase, the vector of spontaneous polarization lies in the xz plane (m plane), but in the β phase there appears a y component of the polarization, as a result of which the crystal becomes triclinic.
4. As a result of these stresses and of the noncollinearity of the polarization vector P_s in different domain systems, it becomes possible to display visually the trace of the domain structure.
5. Since the motion of the domain walls takes place in a field of inhomogeneous mechanical deformation, an appreciable domain contribution to the dielectric constant is produced.
6. The difference between the effects brought about by the x and y polarization components, and the different behavior of these components themselves and of the coercive fields corresponding to them offer definite evidence of two es-

Card 2/3

Card 3/3 blg

ANTONOV, A.M., prof., red.; VOL'FKOVICH, M.P., prof., red.;
ZAKHAROVA, G.N., dots., red.; IVANOV, N.R., dots., red.;
IOFFE, I.L., prof., red.; FOY, A.M., prof., red.;
SHAMARIN, P.I., prof., red.; SHERISHORINA, S.I., prof., red.

[Transactions of the First City Conference of Young Scientists, Medical Section] Trudy Pervoy gorodskoy konferentsii molodykh nauchnykh rabotnikov. Meditsinskaya sektiya. Saratov, Saratovskii meditsinskii in-t, 1963. 295 p. (MIRA 18:5)

1. Gorodskaya konferentsiya molodykh nauchnykh rabotnikov. Meditsinskaya sektiya. 1st, Saratov.

IVANOV, N. R.

NIKOLAY ROMANOVICH

Ivanov, N. R. --" Materials on the Study of the Clinical Aspects and
Diagnosis of Typhoid Fever among the Vaccinated." Min Public Health
RSFSR, Saratov State Med Inst, Saratov, 1955 (Dissertation for the
Degree of Candidate of ~~Veterinary~~ Sciences)

Medical

SO: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

Chr. of Infectious Diseases

YAKUNIN, Yu.A., kandidat meditsinskikh nauk; IVANOV, N.R., kandidat
meditsinskikh nauk

Clinical aspects of an abortive course of poliomyelitis. Vop.okh.
mat. i det. 1 no.1:25-30 Ja-F '56. (MLRA 9:9)
(POLIOMYELITIS)

IVANOV, N. R.

High yields of leguminous crops. Moskva, Gos. izd-vo selkhoz. lit-ry, 1952. 119 p.

IVANOV, Nikolay Rodionovich, kandidat biologicheskikh nauk; LEONT'YEV, V.M.,
kandidat sel'skokhozyaystvennykh nauk, redaktor; PROTASEVICH, D.S.,
redaktor; VODOLAGINA, S.D., tekhnicheskiy redaktor

[Beans of the genus Phaseolus] Fasol'. Pod obshchei red. V.M.Leont'yeva.
Moskva, Gos. izd-vo selkhoz. lit-ry, 1955. 278 p. (MIRA 9:8)
(Beans)

IVANOV, Nikolay Rodionovich, kand. biolog.nauk; GONCHAROV, B.P., red.;
BARANOVA, L.G., tekhn. red.

[Planting legumes on stubble] Pozhniivnye posevy bobovykh kul'tur.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 95 p. (MIRA 14:12)
(Planting legumes on stubble)

IVANOV, N.R., VESELOVA, YE. P., SMIRNOVA-IKONNIKOVA, M.I. (USSR)

"Effect of Prolonged Storage on the Fractional Composition of the
Proteins, Enzyme Activity and the Germination of Leguminous Seeds.

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug 1961.

IVANOV, Nikolay Rodionovich, kand.biolog.nauk; ALEKSEYEV, Yu.V., red.;
CHUNAYEVA, Z.V., tekhn.red.

[Phaseolus] Fasol'. Izd.2., ispr. 1 dop. Leningrad, Gos.izd-vo
sel'khoz.lit-ry, 1961. 279 p. (MIRA 14:6)
(Beans)

ACCESSION NR: APL039397

S/0070/64/009/003/0363/0372

AUTHORS: Shuvalov, L. A.; Ivanov, N. R.

TITLE: Changes in optical activity of ferroelectric crystals during polarization reversal in the crystals

SOURCE: Kristallografiya, v. 9, no. 3, 1964, 363-372

TOPIC TAGS: ferroelectric material, polarization plane, electric field, mechanical stress

ABSTRACT: The authors seek a means to expand the list of ferroelectrics that will exhibit changes in sign of optical activity through the effect of an electrical field. They also consider possible changes in sign of optical activity of such crystals by means of applied mechanical stress, and they investigate the amount of rotation of the polarization plane (without reversal of sign). They analyze ferroelectric phases in enantiomorphic and plane (m and 2mm) classes. In a table they list all the ferroelectric phase transitions to optically active classes and show the possibility of change in sign of optical activity. They point out that it has already been demonstrated that polarization reversal of ferroelectric crystals is

Card 1/2

IVANOV, N. R.

"The role of cyclic crossings between eco-geographical groups of cultivated leguminous plants in the evaluation of their genetical potential (TAX)."

report submitted for 10th Intl Botanical Cong, Edinburg, 3-12 Aug 64.

Inst of Plant Industry, Leningrad.

L 00443-67 EWT(m)/EWP(j)/EWP(t)/ETI IJP(c) JD/JAJ/RM

ACC NR: AP5024333

SOURCE CODE: UR/0070/66/011/004/0614/0621

AUTHOR: Ivanov, N. R.; Shuvalov, L.A.

ORIG: Instituto of Crystallography AN SSSR (Institut kristallografii AN SSSR)

TITLE: Behavior of optical indicatrices of certain monoclinic ferroelectric crystals with change in temperature

SOURCE: Kristallografiya, v. 11, no. 4, 1966, 614-621

TOPIC TAGS: ferroelectric crystal, optic analysis, crystal optic property, light polarization, temperature dependence, paraelectricity, Curie point

ABSTRACT: This is a continuation of earlier work (Kristallografiya, v. 9, no. 3, 363, 1964) and it is devoted to a measurement of the rotation of the optical indicatrix in three monoclinic ferroelectric substances (triglycinesulfate, triglycine selenate, lithium hydroselenite) with change in temperature. The angle of rotation was measured by two methods, polarimetric and conoscopic (both results gave excellent agreement), but only the conoscopic method was used to measure the angle of the optical axis. All the experiments were made with the aid of a spectral polarimeter developed by the author (with A.V. Mironskiy and G.D. Shnyrev), and

Card 1/2

UDC: 548.0:535.52

L 09443-67

ACC NR: AF6024668

4
prepared by the Design Office of the Crystallography Institute. The apparatus and the test procedure are described in detail. The results show that the temperature dependence of the rotation of the optical indicatrix was linear in the paraelectric and strongly nonlinear in the ferroelectric phase in the case of triglycin sulfate and selenate. The Curie points found from these plots were 48.2 and 22.9C for the sulfate and selenate, respectively. With decreasing temperature, the relation again becomes linear. In the case of lithium hydrogensulfate, the dependence was linear in the entire range of temperatures. The results are interpreted on the basis of the thermooptical and spontaneous electrooptical and elastooptical effects. It is shown that the obtained results lead to several general conclusions and estimates. The authors thank I. S. Zholudev for useful discussions, and the staff member of the Institute of Physics of the Czechoslovak Academy of Sciences B. Brzhozin and of the Institute of Crystallography AN SSSR I. V. Gavrilov for supplying the crystals for the investigation. Orig. art. has: 6 figures, 13 formulas, and 1 table.

SUB CODE: 20/

SUBM DATE: 17Nov65/

ORIG REF: 005/

OTH REF: 012

Card 2/2

ACC NR: AR6029298

SOURCE CODE: UR/0271/66/000/006/B032/B032

AUTHOR: Ivanov, N. S.; Smagin, V. A.

TITLE: Reverse magnetization of a section of film in a ferromagnetic thin film memory device

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 6B250

REF SOURCE: Sb. Fiz.-tekhnol. vopr. kibernet. Seminar. Vyp. 1. Kiyev, 1965, 96-107

TOPIC TAGS: ferromagnetic film, magnetic thin film, electromagnetic memory

ABSTRACT: Formulas are presented for calculating the optimum size of an address field thus assuring reverse magnetization of a section of thin film located below a conductor. It is indicated that when the address field is increased above the optimum value the necessary values of the discharge field and current must be increased linearly. It is assumed that an analysis with analogous conclusions can be made also for films deposited in the form of spots. The results of an experimental investigation of the address and discharge fields for permalloy and other films are given which agree well with the theoretical conclusions. [Translation of abstract] 5 illustrations, 1 table, and bibliography of 4 titles. V. S.

SUB CODE: 09

Card 1/1

UDC: 681.142.652.6

ACC NR: AR6029299

SOURCE CODE: UR/0271/66/000/006/B032/B033

AUTHOR: Ivanov, N. S.

TITLE: The stability of data storage in ferromagnetic thin film memory units

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 9B251

REF SOURCE: Sb. Fiz.-tekhnol. vopr, kibernet. Seminar. Vyp. I. Kiyev, 1965, 108-115

TOPIC TAGS: data storage, magnetic film storage, thin film memory

ABSTRACT: The results are presented of an investigation of the effect of digit currents in the adjacent sections of a thin film on the uncalled numbers as a function of the size of both the remagnetized section and the film thickness. It is found that the stability of data storage increases with an increase in the spacing between the axes of digit wires. The most stable are the data recorded on an 85-nm thick film with word wires 0.2--0.4 mm wide, and with the spacing between the axes of digit wires of 1--2 mm. This corresponds to a recording density of 50--100 characters/cm². The observed minimum stable domain measured 0.25 x 0.24 mm. Such dimensions correspond to a recording density of the order of several thousand characters/cm². [Translation of abstract] 5 illustrations and 1 table. V.S.

SUB CODE: 09

UDC: 681.142.652.6

Card 1/1

ACC NR: AM5023901

Monograph

UR/

Ivanov, Nikolay Sergeyevich; Gavril'yev, Rev Ivanovich

Thermophysical properties of frozen rock; handbook (Teplofizicheskiye svoystva merzlykh gornykh porod; spravocnoye posobiye) Moscow, Izd-vo "Nauka," 1965. 71 p. illus., biblio. (At head of title: Akademiya nauk SSSR. Sibirskaya otdeleniye. Institut merzlotovedeniya) Errata printed on the back cover. 1500 copies printed.

TOPIC TAGS: soil mechanics, soil behavior, permafrost, structural engineering

PURPOSE AND COVERAGE: Basic concepts of the forms and coefficients of heat transfer and water movement are described for various types of ground: thawed, freezing, thawing, and completely frozen. Dependencies of volumetric heat capacity, as well as coefficients of heat and temperature conductivity upon moisture, density, and temperature are presented analytically and graphically. The relationship between the temperature and the coefficients of water movement in freezing ground is evaluated. The book is intended for surveyors, as well as engineering and technical personnel concerned with the study of the heat regime of the frozen layers of the earth's crust and with the thermal interaction between engineering structures and frozen ground. There are 65 references, of which 60 are Soviet.

Card 1/3

UDC: 622.013:624.2

ACC NR: AM5023901

TABLE OF CONTENTS [abridged]:

Foreword -- 3

Introduction -- 5

List of basic symbols used -- 8

1. General notions about the thermophysical properties of frozen ground -- 9
2. Volumetric heat capacity -- 15
3. Coefficient of heat conductivity -- 22
4. Coefficient of temperature conductivity -- 32
5. Thermophysical properties of snow and ice -- 38
6. Effect of the decrease in the coefficient of heat conductivity of rocks in the initial freezing stage -- 47
7. Effect of the cryogenic texture on the thermophysical properties

Card 2/3

ACC NR: AM5023901

of frozen rocks -- 52

8. Dependence of temperature on the coefficient of the movement of bound water in frozen ground -- 61

9. Basic methods for determining the thermophysical properties of rocks -- 66

Bibliography -- 70

SUB CODE: 08,13 / SUBM DATE: 09Dec64/ ORIG REF: 055/ OTH REF: 010

Card 3/3

L 36818-66 EWT(d)/EWT(m)/EWP(1)/EWP(t)/ETI IJP(c) GG/BB/JD/GD

ACC NR: AT6017026

SOURCE CODE: UR/0000/65/000/000/0006/0010

AUTHOR: Ivanov, N. S.

ORG: none

TITLE: Logic elements using the domain shifts in a magnetic film

SOURCE: AN UkrSSR. Kiberneticheskaya tekhnika (Cybernetic techniques).
Kiev, Naukova dumka, 1965, 6-10

TOPIC TAGS: logic element, magnetic thin film, thin film circuit

ABSTRACT: This article describes the operation of a shifting magnetic-film register. A study is made of the dependence of the region of its stable operation on film geometry, its thickness, and the amplitude and the duration of the shifting pulses. The author used anisotropic thin films (20—160 nm) of 82% Ni and 18% Fe which were precipitated in a $6 \cdot 10^{-5}$ mm Hg vacuum at a rate of 20 nm/sec on target glasses, heated to 300C, in a directed magnetic field. It is found that the design of a shift register, which uses the motion of domains in a magnetic film for the coding of information, is feasible. The model designed by the author operated at $\pm 15\%$ tolerances of shift current amplitude. Problems related to raising the performance reliability of the register and increasing its speed of response require further study. Orig. art. has: 5 figures.

SUB CODE: 09/ SUBM DATE: 28Jul65/ ORIG REF: 001/ OTH REF: 004

Card 1/1

IVANOV, Nikolay Stepanovich; GERSHANOV, Savelly Vladimirovich; SHNIDYERMAN,
K.A., red.; ABRAMOVA, Ye.A.

[Efficient use of machinery on collective farms] Ratsional'noe
ispol'zovanie tekhniki v kolkhozakh. Rostov-na-Donu, Rostovskoe
knizhnoe izd-vo, 1960. 54 p. (MIRA 14:3)
(Agricultural machinery)

IVANOV, N.S.; RAKHLIN, Ye.D.

Formation of mercury rectifiers with transformers fed from the system. Elek. i tepl. tiaga 4 no. 12:9-10 D '60. (MIRA 14:1)

1. Zamestitel' nachal'nika Tul'skogo uchastka energosnabzheniya (for Ivanov). 2. Starshiy inzhener Tul'skogo uchastka energosnabzheniya (for Rakhlin).

(Electric railroads--Substations)

MINENKO, V.I.; PETROV, S.M.; IVANOV, N.S.

Behavior of a platinum electrode in silicate melts. Zhur. fiz.
khim. 35 no.7:1534-1537 J1 '61. (MIRA 14:7)

1. Khar'kovskiy inzhenerno-ekonomicheskii institut,
(Electrodes, Platinum) (Silicates)

IVANOV, N.S.

From the Plenum of the Ural Regional Trade-Union Committee.

Razved. i okh. nedr 28 no.8:55-56 Ag '62. (MIRA 15:8)

1. Ural'skiy territorial'nyy komitet profsoyuza.
(Ural Mountain region--Prospecting) (Trade unions)

IVANOV, N.S., otv. red.; BALOBAYEV, V.T., otv. red.; BANKVITSER,
A.L., red. izd-va; STRELETSKIY, I.A., tekhn. red.

[Heat exchange and mass transfer in frozen soils and rocks]
Teplo- i massoobmen v merzlykh pochvakh i gornyykh porodakh.
Moskva, 1961. 110 p. (MIRA 14:5)

1. Akademiya nauk SSSR. Institut merzlotovedeniya.
(Frozen ground) (Rocks--Thermal properties)
(Soil moisture)

IVANOV, N.S., otv.red.; HALABAYEV, V.T., otv.red.; BANKVITSER, A.L.,
red.ind-va; SPRELETSKIY, I.A., tekhn.red.

[Heat and mass exchange in frozen soils and rocks] Teplo- i
massoobmen v merslykh pochvakh i gornykh porodakh. Moskva,
1961. 142 p. (MIRA 14:3)

1. Akademiya nauk SSSR. Institut mrazlotovedeniya. Severo-
Vostochnoye otdeleniye.
(Frozen ground)

IVANOV, Nikolay Sergeyevich; SHVETSOV, P.F., otv. red.; BANKVITSER,
A.L., red. izd-va; RYLINA, Yu.V., tekhn. red.

[Heat exchange in the frozen zone of the lithosphere] Teplo-
obmen, v kriolitozone. Moskva, Izd-vo Akad. nauk SSSR, 1962.
198 p. (MIRA 16:1)

1. Chlen-korrespondent Akademii nauk SSSR (for Shvetsov).
(Frozen ground)

IVANOV, N.S.

Theory of the heat conductivity of soils and rocks as statistical
systems. Mat.k uch.o merz.zon.zem.kory no.8:160-186 '62.
(MIRA 16:3)
(Soils---Thermal properties) (Rocks---Thermal properties)

BOGDASHEVSKIY, Viktor Ivanovich; DONICH, Konstantin Konstantinovich [deceased]; IOFFE, Veniamin Isaakovich; KLEMPERT, Yakov Emmanuilovich; KOLYANKOVSKIY, Viktor Polikarpovich; KRAINSKIY, Abram Isayevich; POLOTSKIY, Solomon Gertsovich; SVIRSKIY, Solomon Vladimirovich; ANDREYEV, P.A., retsenzent; IVANOV, N.S., retsenzent [deceased]; POMAZKOV, N.S., retsenzent; KRAINSKIY, A.I., nauchn. red.; SHAKHNOVA, V.M., red.; KOROVENKO, Yu.N., tekhn. red.

[Accounting in shipbuilding and machinery manufacturing enterprises] Uchet na sudostroitel'nykh i mashinostroitel'nykh predpriiatiakh. [By] V.I. Bogdashevskii i dr. Lenin-grad, Sudpromgiz, 1963. 502 p. (MIRA 17:3)

IVANOV, N.S.; ANNENKOV, Yu.N.

Automatic multichannel photorecorder for geocryological observations.
Trudy Sev.-Vost.otd.Inst.merzl.AN SSSR no.1:101-110 '58.
(MIRA 16:12)

IVANOV, N.S.

PHASE I BOOK EXPLOITATION

SOV/6481

Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut
merzlotovedeniya.

Teplo- i massobmen v merzlykh tolshchakh zemnoy kory (Heat and Mass
Transfer in the Frozen Strata of the Earth's Crust) Moscow, Izd-vo
AN SSSR, 1963. 213 p. Errata slip inserted. 1200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Sibirskoye otdeleniye
Institut merzlotovedeniya.

Resp. Ed.: N.I. Saltykov, Professor, Doctor of Technical Sciences;
Ed.: A.L. Bankvitser; Tech. Ed.: V.G. Laut.

PURPOSE: This book is intended for research workers in permafrost and
geocryology.

COVERAGE: This collection of papers deals with the results of theo-
retical, laboratory, and field research on heat transfer in frozen

Card 1/7

Heat and Mass Transfer (Cont.)

SOV/6481

ground and in ice carried out by the staff of the Heat- and Mass-Transfer Division of the Institute of Permafrost Study, Siberian Branch, AN SSSR. The theory of heat- and mass-transfer in ice, frozen and thawed ground, and rocks is discussed. The problem of heat transfer between engineering structures and frozen ground is investigated. Methods used in these investigations and the instrumentation and equipment designed by the authors are described.

TABLE OF CONTENTS:

Foreword

3

Ivanov, N.S. The Heat Regime of the Upper Layer of the Earth's Crust in the Yakutsk Area

9

Gavrilova, M.K. The Heat Regime of Surface and Near-Surface Rocks According to Calculations and Observations Made at the Suntar-Khayat High-Altitude Mountain Station in 1959

56

Card 2/7

Heat and Mass Transfer (Cont.)

SOV/6481

Balobayev, V.T. Calculation of Wasting of Glaciers and
nalseds 117

Ivanov, N.S. The Thermal Regime of the Cryozone With Regard
to its Thermal Anisotropy 124

Chistotipov, L.V. The Hydrothermal Regime of a Moist
Sample of a Dispersive Material in Contact With a
Non-hygroscopic Standard Body 131

Mostakhov, S.Ye. Calculated Climatic Characteristics for
Designing Buildings and Structures in the Territory
of the Yakutsk ASSR 137

Ivanov, N.S. Determination of the Thermal Conductivity
Coefficient for Cryogenic Media Using the Theory of the
Generalized Regular Thermal Regime 148

Card 4/7

Heat and Mass Transfer (Cont.)

SOV/6481

- Ivanov, N.S. On the Question of the Possibility of
Determining the Thermal Conductivity Coefficient for
Cryogenic Media Using the Theory of the Regular
Thermal Regime 157
- Filippov, P.I. An Instrument for the Determination of
the Thermal Conductivity Coefficient of Rocks in
Boreholes Without Casings 160
- Korennov, B.I., and V.A. Savinov. An Instrument for
Measuring the Dielectric Permeability of Rock Samples 165
- Kutasov, I.M. Speed Determination of Thermal Convection
Currents in Boreholes 168
- Ivanov, N.S. Interference Method for the Determination
of Thermal Currents in Soils and Rocks 175

Card 5/7

Heat and Mass Transfer (Cont.)

SOV/6481

- | | |
|---|-----|
| Ivanov, N.S. Measurement of Thermal Currents With Spherical and Cylindrical Probes in a Stationary Regime | 185 |
| Ivanov, N.S. Nonstationary Methods for the Determination of Thermal Currents With Spherical and Cylindrical Probes | 191 |
| Mandarov, A.A. Laboratory Equipment for the Study of Heat- and Mass-Transfer in Soils and in Rocks | 198 |
| Kutasov, I.M. Determination of the Overheating Temperature of Thermistors | 203 |
| Ivanov, N.S., Yu.N. Annenkov, and Yu.A. Tyshev. A Device for the Automatic Switchover of the Measuring Range in (Electric) Bridge Systems | 207 |

Card 6/7

IVANOV, N.S.

No mention of the most important thing. Kozh.--obuv.prom. no.1:34
Ja '59. (MIRA 12:6)

(Leather industry--Standards)

GOLIKOV, A.I., inzh.; IVANOV, N.S., inzh., SMIRNOV, V.I., kand. tekhn. nauk :
SHIRSHOV, I.G., inzh.

Precision in placing holes in auxiliary machinery bases and
in supporting floors of a ship's substructure. Sudostroenie
24 no.9:49-56 S '58. (MIRA 11:11)
(Marine engineering)

Ivanov, N. S.

✓ 1070 AEC-tr-2307

FISSION OF URANIUM NUCLEI BY PROTONS WITH AN
ENERGY OF 460 MEV. N. S. Ivanov, N. A. Perfilov, and
V. P. Shamev. Translated from Doklady Akad. Nauk

S.S.S.R. 103, 573-8(1955). Available from Consultants
Bureau (Collection No. 4 of Soviet Research in High Energy
Physics), New York.

62 The fission cross section of U for 460 Mev protons was
determined as 1.2 ± 0.3 b. Angular and energy distribution
of fission particles were analysed. (D.E.B.)

MEL'NIKOV, P.I., red.; IVANOV, N.S., red.; KARTASHOV, S.N., red.;
KACHURIN, S.P., red.; SALTYKOV, N.I., red.; SHEYNMAN,
V.S., red.izd-va; ZUDINA, V.I., tekhn. red.

[Present-day problems of regional and engineering geocryology (cryopedology)] Sovremennye voprosy regional'noi i inzhenernoi geokriologii (merzlotovedeniia). Moskva, Izd-vo "Nauka," 1964. 208 p. (MIRA 17:3)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut merzlotovedeniya.

IVANOV, N.S.; SAL'NIKOVA, T.N.; FIL'BERT, D.V.

System for automatic determining the melting point and rate
of crystallization of polymers. Plast. massy no.11:51-52 '64
(MIRA 18:1)

IVANOV, Nikolay Sergeevich; GAVRIL'YEV, Rev Ivanovich

[Thermophysical properties of frozen rocks; a manual]
Teplofizicheskie svoistva merzlykh gornyykh porod;
spravochnoe posobie. Moskva, Nauka, 1965. 71 p.
(MIRA 18:1)

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSING AND PROPERTY INDEX																			
IVHNOV, IV-V																			
Ca																			
<p>Production of vanadium slag in basic open-hearth furnaces. N.V. Ivanov. <i>Ural. Met.</i> 1939, No. 7, 25-7; <i>Khm. Refert. Zhur.</i> 1939, No. 12, 60. — Increase of the Si content of the cast iron from 0.3-0.4% to 0.6-0.7% increased the yield of slag; the capacity of the open-hearth furnaces increased from 50 to 80 tons. By replacing Fe ore with V agglomerate the yield of V increased by 10-14% and the content of V in cast iron decreased. V cast iron must contain Si 0.4-0.7%, Mn up to 0.50% and V 0.53-0.60%. The production of V slag is considerably simpler and its losses are smaller if the content of V_2O_5 is 7-10%. Fe ore should not be added before the addition of V slag because the oxides of Fe bind P_2O_5, which passes into slag. This produces ferrovanadium higher in P.</p> <p style="text-align: right;">W. H. Henn</p>																			
2																			
<p>ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> <p>100000 01 100000 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01</p>																			

IVANOV, N. V.

FD 168

USSR/Chemistry - Phenolic Plastics

Card 1/1

Author : Avrasin, Ya. D., Cand Tech Sci, and Ivanov, N. V.

Title : The effect of some factors of the technological process of textolite production on the physical and mechanical properties of this product.

Periodical : Khim. prom. 3, 21-24 (149-152), April-May 1954

Abstract : Describe investigation on the effect of the resin content on the physical and mechanical properties of textolite. Conclude that a resin content of 50-55% is best. Illustrated by 3 graphs and 2 charts. 4 USSR references and 2 foreign references are appended.

IVANOV, Nikolay Vasil'yevich; MALYUTIN, Nikolay Kuz'mich; FLEYSHMAN, Abram
L'vovich; BURSHTAIN, I.I., retsenzent; LOBODIN, P.V., retsenzent;
MOROZOV, A.N., retsenzent; LYUBOVICH, Yu.O., kandidat ekonomicheskikh
nauk, redaktor; TEMKIN, A.V., redaktor izdatel'stva; UVAROVA, A.F.,
tekhnicheskii redaktor.

[Supply of materials and equipment in machinery manufacturing] Material'-
no-tekhnicheskoe snabzhenie v mashinostroenii. Moskva, Gos.nauchno-
tekhn.izd-vo mashinostroit.lit-ry, 1956. 275 p. (MIRA 10:4)
(Machinery industry)

IVANOV, N.V.; MALYUTIN, N.K.; FLEYSHMAN, A.L.; KARPOV, P.P., inzh.,
retsenzent; SAUTIN, I.A., ekonomist, retsenzent; SHUBNIKOV, A.K.,
prof., doktor tekhn.nauk, red.; TKOCHUN, A.I., red.izd-va;
UVAROVA, A.F., tekhn.red.

[Supplying industries of regional economic councils with materials
and equipment] Material'no-tekhnicheskoe snabzhenie promyshlen-
nosti sovnarkhozov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1961. 307 p. (MIRA 14:6)

(Industrial procurement)

Ivanov, N.V.

GONCHAREVICH, I.I., inzhener; IVANOV, N.V., inzhener.

Mechanized cable reellers for submerged pumps. Bezop.truda v prom. 1
no.3:28 Mr '57. (MIRA 10:4)
(Pumping machinery)

USSR/Human and Animal Physiology (Normal and Pathological).
Blood Pressure. Hypertension.

T-4

Abs Jour : Ref Zhur - Biol., No 16, 1958, 74777

Author : ~~Ivanov, N.V.~~

Inst : Moscow Veterinary Academy.

Title : Concerning an Instrument - the "Oscillatometer" - for
Indirect Determination of Blood Pressure in Agricultural
Animals and Humans.

Orig Pub : Tr. Mosk. vet. akad., 1957, 20, 207-209.

Abstract : No abstract.

Card 1/1

IVANOV, N.V.

Spacing of feed cabbage. Zemeledelie 6 no.6:83-86 Je '58.
(Cabbage) (MIRA 11:6)

IVANOV, N. V.: Master Agric Sci (diss) -- "A study of the feeding area of
~~IVANOV, N. V.~~
fodder cabbage". Moscow, 1959. 17 pp (Order of Lenin Agric Acad im K. A.
Timiryazev), 110 copies (KL, No 9, 1959, 116)

IVANOV, N.Y.; KUDRYAVTSEV, S.P., red.; NAUMOV, K.M., tekhn. red.

[Possibilities for increasing grain production in the U.S.S.R.]
Rezervy uvelicheniia proizvodstva zerna v SSSR. Moskva, Izd -
vo VPSH i AON pri TsK KPSS, 1960. 56 p.

(MIRA 14:5)

(Grain)

IYAMOV, N.Y.

PLATE 1 BOOK REFERENCE - 307/1924

Aravala, Y.A., ed., Candidate of Technical Sciences

Stalokostolity i drugye konstruktsionnye plastiki; sbornik stat'yi (Glass
Tertolites and Other Construction Plastics) Collection of Articles) Moscow,
Gosstatiz, 1960. 167 p. Aravala clip inserted. 1,050 copies printed.

M. of Publishing House: I.A. Smirnova; Tech. Ed.: E.A. Pukhlikova; Managing Ed.:
A.A. Lapovskaya, Engineer.

PURPOSE: This collection of articles is intended for personnel of plants, design
offices, and scientific research institutes.

COVERGE: The collection of articles contains experimental data on glass tertolites
and structural plastics. The papers discuss the physical, mechanical, and elec-
tric insulating properties of laminated and compounded plastics under normal and
high temperatures. Topics include the technological methods of manufacturing
large-size articles; glass cloth honeycomb fillers used in electronics, the me-
chanical characteristics of some of the laminated plastics with respect to bolt-
ed or riveted joints, and the dielectric properties of glass tertolites used in
the semiconductor wave range. The changeability of physical, mechanical, and
electric insulating properties of glass tertolites, pressed plastics of fibrous
structure (A-4, B-4, B-5, B-6, B-7, B-8) and powder plastics (A-4, and B-7) under
the effect of temperature is also covered. No personalities are mentioned.
There are no references.

TABLE OF CONTENTS:

Kisler, S.A., and V.F. Kravtchik [with the participation of Senior Technicians
M.A. Kravtchik, and E.V. Kozlovskaya] Insulation Structural Electronic Glass
Tertolites 71

Aravala, Y.A. [with the participation of A.I. Prigunova, and V.F. Shilpov] 11
Glass Tertolites Based on Polyester Acrylate Binders

Prigunova, V.A., and V.I. Lobodina. Dielectric Properties of Glass Tertolites 36
in the Condenser Gaps

Yakovlev, S.F. Technological Features of Manufacturing Large Size Articles
from Glass Tertolites 49

Shilpov, V.A., and Y.A. Aravala. On the Mechanical Characteristics of Some
Laminated Plastics with Respect to the Strength of Bolted or Riveted Joints 70

Yakovlev, S.F. Glass Cloth Honeycomb Fillers and Their Properties 103

Zakharov, V.A., V.I. Zakharova, and O.F. Radzinskaya. New Powder
Plastics for Molding 120

Zakharov, V.A., O.F. Radzinskaya, and V.I. Zakharova. Changeability of
the Physical, Mechanical, and Electric Insulating Properties of Some
Molding Materials Under the Effect of Temperature and Other Factors
(Moisture, Fuel, and Oil) 129

AVAILABILITY: Library of Congress

Card 3/3

7-18-67

7

27529
S/123/61/000/014/005/045
A004/A101

17.1352
1.3000

AUTHOR:1 Ivanov, N. V.

TITLE: Honeycomb fillers on the basis of glass fabric and their properties

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1961, 22, abstract 14A166 (V sb. "Steklotekstolity i drugie konstrukts. plastiki". Moscow, Oborongiz, 1960, 108-119)

TEXT: Honeycomb fillers made from 3CT5 (ESTB) glass fabric of 0.1 mm thickness containing 30 - 40% resin were tested as to their applicability in the manufacture of parts operating during protracted periods of time at temperatures of up to 200°C. Of the resins tested grade 5C/(BSL) phenolformaldehyde resin showed the best heat resistance. The fabric sheets were glued with the 5P-2 (BF-2) glue. The specimens were of square shape and had a lateral length of 40mm and a height of 10 mm. The load was applied in the direction of the height (cell face ends). It was found that an increase in the resin content resulted in a growing honeycomb volumetric weight and an increase in compression strength. After the specimens were subjected to a temperature of 200°C during 200 hours,

Card 1/2

27529

S/123/61/000/014/005/045

A004/A101

Honeycomb fillers on the basis of glass ...

δ_b compr decreased by 40-50%. At a temperature of 250°C the same drop in δ_b compr takes place already after 50 hours. The author describes the manufacturing technology of honeycomb fillers and three-layer structures.

[Abstracter's note: Complete translation]

Card 2/2

VIASOV, N.I.; SAUTIN, I.A.; IVANOV, N.V., kand.ekon.nauk, dotsent

Review of "Organization and planning of supply procurement and
product marketing in machiner plants." Vest.mash. 40 no.6:84-
85 Je '60. (MIRA 13:8)

(Machinery industry)

VOLKOVA, I.B.; NALIVKIN, D.V.; SLATVINSKAYA, Ye.A.; BOGOMAZOV, V.M.;
 GAVRILOVA, O.I.; GUREVICH, A.B.; MUDROV, A.M.; NIKOL'SKIY, V.M.;
 OSHURKOVA, M.V.; PETRENKO, A.A.; POGREBITSKIY, Ye.O.; RITENBERG,
 M.I.; BOCHKOVSKIY, F.A.; KIM, N.G.; LUSHCHIKHIN, G.M.; LYUBER,
 A.A.; MAKEDONTSOV, A.V.; SENDERZON, E.M.; SINITSYN, V.M.; SHORIN,
 V.P.; BELYANKIN, L.F.; VAL'TS, I.E.; VLASOV, V.M.; ISHINA, T.A.;
 KONIVETS, V.I.; MARKOVICH, Ye.M.; MOKRINSKIY, V.V.; PROSVIRYAKOVA,
 Z.P.; RADCHENKO, O.A.; SEMERIKOV, A.A.; FADDEYEVA, Z.I.; BUTOVA,
 Ye.P.; VERBITSKAYA, Z.I.; DZENS-LITOVSKAYA, O.A.; DUBAR', G.P.;
 IVANOV, N.V.; KARPOV, N.F.; KOLESNIKOV, Ch.M.; NEFED'YEV, L.P.;
 POPOV, G.G.; SHTEMPEL', B.M.; KIRYUKOV, V.V.; LAVROV, V.V.;
 SAL'NIKOV, B.A.; MONAKHOVA, L.P.[deceased]; MURATOV, M.V.;
 GORSKIY, I.I., glav. red.; GUSEV, A.I., red.; MOLCHANOV, I.I.,
 red.; TYZHNNOV, A.V., red.; SHABAROV, N.V., red.; YAVORSKIY, V.I.,
 red.; REYKHERT, L.A., red.izd-va; ZAMARAYEVA, R.A., tekhn. red

[Atlas of maps of coal deposits of the U.S.S.R.] Atlas kart ugle-
 nakopleniya na territorii SSSR. Glav. red. I.I.Gorskii. Zam.
 glav. red. V.V.Mokrinskiy. Chleny red. kollegii: F.A.Bochkovski
 i dr. Moskva, Izd-vo Akad. nauk SSSR, 1962. 17 p.

(MIRA 16:3)

1. Akademiya nauk SSSR. Laboratoriya geologii uglia. 2. Chlen-
 korrespondent Akademii nauk SSSR (for Muratov).

(Coal geology--Maps)